

in vogue. Those who engage in this profession usually provide themselves with a small table about three feet long by fifteen inches wide, and establish it in any busy thoroughfare. The market, temple, and street corner prove their particular haunts, and the garrulousness of the money-lender adds to the general confusion of the street noises. The strings of copper cash, often secured to the table by a chain, are piled up on one side, and the silver together with the small ivory yard with which it is weighed is kept in drawers. Their sign is a wooden figure carved in the form of a cylinder to represent a string of cash.

THE COSMOS AND ITS MEANING.

BY FRANK R. WHITZEL.

[In the following article, Mr. Whitzel offers a philosophic interpretation of the tenets of the Psychical Research Society. While fundamentally disagreeing with him on the subject, *The Open Court* presents his paper as an able statement of what some regard as the only escape from intellectual and moral despair.—Ed.]

NO one can avoid holding some idea, clear or hazy, in regard to the mechanism and the general purpose of the universe. Since the dawn of study explanatory theories ranging from crudest anthropomorphism to purest subjectivism have been advanced and, as knowledge increased, discarded or modified; but inherent weaknesses still render doubtful every possible hypothesis. The problem has been approached through three principal channels, philosophy, revelation, and science.

Philosophy.

Ancient philosophy, beginning with high confidence, was in the end unable to answer the skeptics, who denied that anything could be really proven since all our faculties were liable to error; hence, it was constrained to admit that the universe might possibly be but a mental illusion. In modern philosophy the system known as idealism, perceiving that nothing can be known save as it presents itself to consciousness, asserts that physical nature is the expression of thought, necessarily of a divine thought. Realism, more prosaic, assumes external nature to be a fact and also accepts the fundamental data of science, but it is compelled to do both practically on faith since they constitute an objective reality outside of consciousness. Pragmatism, a species of realism now in vogue, argues that,

inasmuch as man is obliged to accept some things he cannot demonstrate, he should accept those ideas that prove most useful: they are true if they work.

The weak point of all philosophy is the fact that we are connected with external phenomena through our consciousness alone; that is, judgments can be formed only through our physical senses and our reason. Now, both of these are admittedly fallible; hence no reliable criterion of truth exists, and we must fall back on the uncertain ground of probability or the common experience of mankind. Thus, both ancient and modern philosophy reach the melancholy conclusion that all knowledge, save only of the existence of consciousness, is of doubtful validity.

Revelation.

Present-day religions originated in prescientific ages and are therefore much alike in their cosmology. They display very admirably man's conceit in thinking himself the most important product of the universe and his incorrigible habit of ascribing to some one else his own fine fortune or achievements, giving credit to a god for the good of earth but excusing him for the evil. All religions adopted at their origin the current conceptions of the cosmos and very soon came to ascribe its existence to the creative act of Deity and knowledge of it to revelation; hence their horrified opposition to new ideas in science. The outer universe, so they taught, revolved around the stationary earth which itself was an oblong plain surrounded by waters and roofed by the firmament, above which dwelt the celestial spirits busied in regulating the stars and opening the windows in the firmament to let the rain fall through. Somewhere in the lower regions was the abode of fallen angels and lost human spirits, ruled by the Enemy, the rival of the King of Heaven. In the upper world a single perfect God had gradually evolved from the previous multiplicity of human-like divinities, and continual war was represented to be waging between the good and the evil angels. Man was the prize of victory as well as a combatant and was thought to have fallen from a perfection which his religion might enable him to reattain.

Buddhism.

On this basis, with individual modifications, are builded the three great religions in which we are interested. Christianity and Mohammedanism accepted it frankly, and the latter is so devoid of originality that it warrants no independent treatment. Gautama

Siddhartha knew of no kingdom of evil, whose place was taken in the system of his people by soul-transmigration. This belief, however, he reconstructed in a singular manner. He asserted that the total result of the activities of an individual, his *karma*, immediately upon his death incarnated in a new life; but he denied that there was any indwelling soul which passed from one embodiment to the next, preserving its identity throughout. Yet he further taught, that by gradually overcoming the desires of the self through life after life, the soul, whose existence he had to all intents denied, might find Nirvana and cease rebirths. The contradiction is obvious and is sufficient to render pure Buddhism repugnant to the modern world in spite of the worth of its ethical content.

Christianity.

Jesus of Nazareth, less abstruse but more practical, taught that belief and righteous action would enable man to escape Sheol and enter at one step the Kingdom of Heaven which was to be established immediately after the destruction of the world, then impending. He had nothing new to offer as to the scheme of organization of either the material or the spirit world and but deemed himself a chosen, though a human instrument to save his people. He was unsuccessful in his mission, quite unknown at his death and mistaken in four fifths of his beliefs. His successors, in winning their tremendous victory, idealized the man out of all resemblance to the Gospel portrait and added a complex body of doctrine to which, save in its ever valid ethics, he was a total stranger. The Gentile invitation and all the great Christian tenets, Atonement, the Sonship, the Virgin Birth, the Trinity, were later developments.

It is hardly necessary to outline what the Church for more than a thousand years taught to be the true organization of the unseen world since now it is all quietly disregarded. The dogmas and the childish beliefs of orthodoxy have been transformed beyond recognition or sent to oblivion, until to-day the best exemplars of Christianity mean by the word something wholly different from what Augustine or Ambrose deemed all-essential. Most of them look upon Jesus the man as an excellent but impossible example and have a hazy idea that, as a vague sort of saviour, he may in some unknown manner help in a still less understood salvation. This is not to be construed as an attack upon the historical origin or the ethical spirit of Christianity. It is merely a statement of an obvious fact, that the orthodox teachings of revelation in regard

to the order and arrangement of the spiritual universe are no longer seriously believed.

Futility and Uncertainty.

As rationalism has upset the metaphysical basis of Christianity, so have the discoveries of modern science shattered the physical foundations of our religions. Their priesthoods, after vainly struggling against the facts, have been reduced to pretending that these facts do not matter. And now we have the spectacle of all our great religious systems based wholly upon a scheme of creation that no intelligent man believes for a moment. The ancient crude ideas of the cosmos permeate all sacred writings to such an extent that, removed, little is left save a lifeless system of morality, correct but commonplace and expressed in the outworn terms of a false cosmology. The orthodox God simply will not fit present-day ideas of the universe, since he must be reduced to the lordship of our pitiful little planet alone—and this raises again the suggestion of a multitude of gods—or be exalted as ruler of the entire cosmos, in which case he has duties so tremendous as to render absurd the idea that he could notice such an insignificant grain of sand as the earth.

Some perhaps irreverent people have even asked why a God at all? How comes it that one spirit is so superior to all other spirits? Why should not the celestial world have a democratic form of government such as on earth we have found most attractive, rather than conform to the Oriental despotisms which ruled mankind when orthodox cosmogony was begotten? Is political progress impossible in spirit land? This is, of course, idle speculation. All we can say certainly is that revelation, like philosophy, in an effort to supply a rational explanation of the cosmos, definitely fails.

Science. Dualism and Its Shortcomings.

Science offers two principal theories explanatory of the cosmic order, dualism and monism. Dualism contends that all reality is divided into two fields, mind and matter, God and nature, the former dominant and exhibiting moral purpose. It is supported by immemorial opinion, by the countless tales in history and legend of contact with a world of spirits, by the presence of intelligence in nature and contrivance in organisms, but chiefly by our well-nigh invincible inner conviction. The first two have little or no scientific sanction, the third is susceptible of another explanation, and the last may be quite deceptive, most of the tangible evidence

pointing that way. But it is with the great foundation theories of modern knowledge, conservation and continuity, that dualism directly collides. The exercise of volition, personal initiation of any thought, independent control of the physical by the mental processes, these would be a creation of energy, hence quite impossible under conservation. As for continuity, like results must always follow like conditions or else all certainty of conclusion, even any possibility of progress in deciphering nature is precluded. And indeed so far as exhaustive experiment can determine, cause and effect are universal and infallible, whereas capricious or at least independent action, physical as well as mental, should be patent if, as dualism holds, nature is governed by a self-motivating mind. A God who does not rule becomes a "superfluous hypothesis."

Monism and Its Difficulties.

These considerations have led science to the general adoption of monism, which asserts that in the cosmos there is but a single substance having merely different manifestations, all being modes of motion and strictly mechanical. This is the theory in its extreme form to which its logic leads if unswervingly pursued, but the less dogmatic of its advocates favor certain reasonable modifications. In general, however, monism accepts determinism, which teaches that the whole of reality is governed by changeless mechanical laws, that all phenomena, mental or physical, including the close relation between the two, are unalterable and are due to previous fixed conditions stretching back in unbroken order to the beginning of time. It follows that life is reduced to terms of physics and chemistry and that a living body is but the harmonious union of its parts.

Objections at once arise. To say nothing of the practical impossibility of finding any single substance capable of manifesting itself at once as mind and its object, there is obviously something indefinable by science but none the less real in a living organism which is not in a non-living, something self-supporting, self-renewing, self-impelling, something which may depart never to return though the body remain undamaged. The relation of thought to action, or more precisely, of mental to the accompanying physical phenomena, is wholly inexplicable if mind is not permitted of its own choice to control. A mechanical connection not only cannot be observed but is opposed to all our ideas of the mode of this interaction. And if it be mechanical, then there is no room in the system for volition, no place for initiation, persuasion, emotion, no

meaning in achievement or renunciation—all are but inexorable results; even cause and effect quite lose their character and become mere sequence in time. But no one, not even monists, can actually live in accordance with such a theory. Forgetting or defying continuity, they yield in their daily life to the power of their own intuition and assume to be free agents, not passive automata as the strict logic of the mechanical theory requires. In this they are no more inconsistent than dualists who must in their research work, like all true investigators, adopt the doctrine of continuity, perhaps unconsciously but as implicitly as the most uncompromising monist.

Doubtless both theories contain much truth, but as correct and complete explanations of reality both seem to succumb, dualism to the necessity and observed presence of continuity in physical nature, monism to the irresistible appeal of volition and the caprice of mental activity.

Further Enigmas.

If attention be turned to the facts of nature the problem appears equally insoluble and the mechanical theory betrays grave weaknesses. To note but a few of the perplexities. Certain stars are moving through space at a velocity ten times greater than can be accounted for by gravity, the only known source of stellar motion. Gravity itself seems to act instantaneously and at a distance without a connecting medium, an absurdity in mechanics. This same force, being wholly unresisted in space, should draw all celestial bodies toward their common center of gravity; and as past time is held to be infinite the whole stellar universe should long ago have coalesced into a single compact and stable system. Space and time defy all analysis, so much so that great thinkers have denied them objective reality and termed them mere "modes of intuition." Matter becomes unintelligibly complex. Its indispensable attribute is weight, yet it is alleged to be made wholly out of electrons which have no weight at all. It is perfectly permeable by these electrons in the form of ether; that is, a given space holds free ether to the utmost limit and in addition holds the ether of which is composed any matter that happens to be there. This ether is affirmed to be of astounding density yet unresisting, perfectly continuous yet differentiated, incompressible yet infinitely elastic, having internal motion rapid as that of light but with no impulse to initiate or maintain it. Though of all theories of matter the electronic is by far the most strongly attested, it yet contains many almost hopeless discrepancies.

Turning to conditions of life on our planet, we find evil to be

ubiquitous and unashamed. Animals cruelly destroy each other, and man destroys them all. Part of the slaughter may be wanton but much of it seems quite unavoidable. Social institutions have developed into a system wherein the vast majority must toil that the few may enjoy, even so in our own country where the harsh conditions are somewhat softened. Viewing the horrors of natural selection with its indiscriminate and merciless butcheries, contemplating the product of society in its slums and crime schools, even looking at the middle section with its lack, and the higher with its waste, of opportunities, who has not felt that if creative power had been his he would have fashioned a far better world, or else have stayed his hand?

Final Negation.

Thus, in all theories of existence are to be found apparently fatal defects. We are encompassed by darkness and contradiction which no thought of the brightest minds has been able to illumine or reconcile. In cosmic processes results alone are to be observed, not moral design. The nature and purposes of reality have been found so ambiguous that philosophy has not seldom given them up and with the courage of despair preached morality for its own sake alone. After more than two millenniums of patient study physical reality has proved inexplicable.

Basis of Reconstruction.

Constructive criticism, though more useful, is far harder than destructive, yet surely it must be possible to find something in nature to replace the mirages of philosophy which thus so readily dissolve. On the whole life is sweet, and no man willingly concedes that the grave is its final goal. Rather does he cherish an ineradicable faith that all this living and dying has a meaning which somehow, somewhere, sometime is sure to be made plain. Otherwise life is but ashes in his mouth.

But in the face of nature's puzzling contradictions, what rational explanation of it can be imagined? Take the case of matter. If a thing absolutely inconceivable be non-existent, and if it be inconceivable that matter either was created out of nothing or has existed from all eternity, must we decide that it is all an illusion? This seems like the only conclusion left us, and it is not so absurd as at first appears. Why are octaves in a musical scale identical in tone? Simply because the human consciousness, functioning through the ear, so interprets them. Now, if every living consciousness should be so organized as to interpret the field of activity alike,

for example in the form of the physical universe, then for each one that universe would be, or at least seem, real, no matter what it might be in fact. All creatures would see the same world and their experiences would be mutually consistent. If after death our consciousness survives it may conceivably enter a state where its environment is interpreted differently; and if all minds should still function alike, there would then be for us an environing cosmos differing from the present one but equally real.

Under this theory—a form of subjective idealism—we might perceive a different and seemingly genuine universe in each of a series of existences, nor recognize the true one until our minds were freed from all possibility of error. Two objections present themselves. Common sense refuses to consider external nature as aught save a concrete reality. And existing consciousness bears too absurdly small a ratio in both quantity and time to the whole cosmos for that cosmos to be in fact its mere appurtenance. Let us see if a more tolerable solution may not be discovered.

The mental horizon of mankind has always been too circumscribed. Ancient sages saw only the middle countries of the old world, India and the Mediterranean littoral, which they imagined to comprise all the universe that mattered. After Columbus the view broadened, and men thought similarly of the earth in its entirety, or of the solar system. With the discoveries of modern science the field again expanded, until now it embraces all the stars, seen and unseen, “that dapple vacancy.” If still we find no reasonable answer to our incessant “why,” perhaps it is because our view is still too narrow, and there needs another widening to take in realms as yet unguessed.

Necessary Assumption.

It is impossible to avoid making some kind of an assumption at the starting-point of any system which attempts to explain reality; the best that can be done is to choose one that is supported by the strongest inferences and restricted to the lowest reducible terms. Let us, then, make an assumption which will likely command the assent of all save the incorrigible pessimist. Though at first thought it may seem to discredit the whole of the preceding argument, it will perchance on further examination be found compatible therewith.

The universe is purposive.

Wise men have found it irrational simply because only a small part of it has been open to their inspection. Seeing one term of

the equation but not the factor that completes it, they very naturally are nonplused and inclined to pronounce it insoluble; they rightly find contradictions. But can the universe, its apparent discordances conceded, be believed an accident? Can any one contemplate the vast and wondrous firmament dotted by stars in millions, some so huge our sun might be their planet; can he reflect on the immeasurable voids that separate celestial bodies, not forgetting that our heavens form but a single galaxy, and of galaxies there may be many so unthinkably distant they appear to us mere filmy nebulae; can he turn from these to note organisms so ephemeral that sun and sun enclose a lifetime or so minute as to defy strongest lens or finest filter, known only by the disturbances they induce; or can he consider etheric vibrations ranging between those slow enough to be made visible and those whose infinite rapidity bankrupts the imagination; and after all this, bearing in mind that every element in the stupendous whole, ultra-microscopic cell no less esteemed than majestic constellation, moves in harmonious obedience to changeless law, can he entertain the fancy that it all is but a creation of blind chance, destitute of intelligent purpose?

Supporting Evidence.

As a preliminary it may be remarked that the stage of matter is adequately set. Suns are observed in every phase of development, from star mist through nebulae and planetaries to dying and even, it is believed, to dead suns, cold and dark; any conceivable quality of physical life might find a fitting domicile.

We need not ground our assumption upon an inner feeling of its truth. This, indeed, staunchly assures us that so vast a production cannot be meaningless, and inner feeling has such potency that it overbears every argument advanced against freedom of the will. But to some subjective considerations we may fairly appeal. Our consciousness tells us directly that we ourselves are actuated by purpose, and this cannot be denied without impeaching the integrity of consciousness itself, the final arbiter of valid knowledge. From this purpose, intuitively and immediately known, we can argue without hazard of refutation to the reality of a greater cosmic purpose.

The existence of what is called conscience is also evidence of telling force on the side of cosmic design. No individual is without it be he ever so ignorant or uncivilized; in fact, the savage is alleged to harken to it more obediently than his enlightened brother. But no one can live quite up to the standard of his conscience. To

every person it speaks from a plane of morality many degrees higher than his own, frequently to his distress, always to his ethical advantage. Its origin is unknown, its personal benefit doubtful. Often it approves actions that bring no selfish profit and causes anguished remorse for those that do. We stand before it dumb and naked while unerring, implacable, it reads our inmost heart. If divinity is, it is divinity; and it offers unshakable testimony in favor of a pure purpose behind reality.

Of objective evidence, strong support is afforded our assumption by the unchallenged sway of the principle of cause and effect. Dare we affirm that the sum of all is exempt from the law which governs every part and parcel? Intelligence is present in the universe. It requires a cause in intelligence just as imperatively as does the physical in the physical.

Even a stronger argument is to be found in organic evolution. Despite many stumblings and backslidings its course has ever been substantially upward. The earliest life on the planet was the simplest, and development has been at all times toward complexity and specialization, which means toward higher organisms. The line of succession was marine to terrestrial, mollusk and worm to vertebrate, fishes to batrachians to reptiles to birds to mammals.

Man, the highest, was the latest comer, but he made entry in a state little different from the more advanced ape. Untold and toilsome ages elapsed before he achieved sufficient mentality to be able to record his struggles; thenceforward his career is open to our view. We need examine but a single collection of writings, the Bible, to be impressed by the extraordinary advance in ideals and by the never failing upward tendency in morals. From human sacrifices plainly indicated by the stories of Isaac and of Jephthah's daughter, the Jews attain to Amos in the eighth century B. C., who quotes Yahweh as saying, "I hate, I despise your feast-days; burnt offerings and meat offerings I will not accept"; and to Hosea, "I desired mercy and not sacrifice." More and more strongly do the prophets urge that righteousness consists not in ceremonies but in dealing justly and showing mercy, hating evil and loving good. What an improvement over the false and bloodthirsty God of the Patriarchs!

Profane history offers equal evidence of constant, if slow, improvement in man's moral ideals and conduct. Wars of conquest, enslavement of the conquered, butchery of prisoners, assassination of political opponents, bills of attainder, torture and barbarous executions, even undue cruelty to animals, all once thought perfectly

proper, are now universally reprobated. Business and political morality has often received just censure, but great has been the change for the better within the last two decades, while the contrast is striking with the customs of the Middle Ages or with those earlier days when Jacob and Laban bilked each other and the same word meant both robber and merchant. Time was when a need of individual or nation justified any method of supplying it. But the sense of right and wrong waxed ever stronger until now, though doubtless still immature, it is so powerful that the world abhors a word-breaker and millions go cheerfully to death for an idea. Can this progressive betterment of conscience and morals, to be observed in politics and business, in diplomacy and racial intercourse, in religion, in spiritual aspirations, and in private conduct, clearly evident from the earliest times down to the present day, be purely fortuitous, unmeaning? It seems too orderly, too consistent despite occasional slips, to be without an intelligent impulse behind it.

Contingent Truths.

That the universal cosmos is to be interpreted in terms of purpose is a generalization which, like all others, has value in proportion as it leads to more specific knowledge. Certain important deductions issue necessarily therefrom and must coincidentally be accepted. Only four of the more significant can be mentioned, but many others just as inevitably though perhaps not always so obviously follow.

1. Intelligence is the most precious quality.

The brain has developed in animal structure from a mere swelling of the nerve at one end of the notochord into a large and complex organ to which every unit and function of the body subserves, while the mind, from being barely able to supply the rudest of living needs, has synchronously expanded until it can comprehend the mechanism of the universe and grapple with the deepest problems of eternity. Growth, snail-slow at the beginning, has been at a constantly accelerating rate, and the reward has been physical comfort, a bettered environment, conquest over nature, consciousness of invincible power.

2. Morality, individual character, is the highest value.

From its first dim glimmer man's moral sense has expanded, as already pointed out, until now it is the dominating force which determines the conduct not of individuals alone but also of all enlightened nations. The morality of to-day, faulty as it is, only a few centuries ago would have been deemed fantastic sentiment,

possible only to a divinity. But it finds reward in a satisfied conscience and in the respect and honor of mankind.

3. Effort is not wasted.

Only through sustained effort has mankind made progress. To this assertion of its value all will agree. But it is not so easy to see intelligent purpose in the wholesale destruction of potentially useful vital energy. Life, animal and vegetable, is produced with limitless prodigality, all but the merest remnant doomed to immediate extirpation. Some defense of the necessity for this massacre is possible, but hardly so, in the present state of our knowledge, is a real justification; and the fact must remain an argument in the mouths of those who can deny the presence of design within the cosmos. To all others it is but one of our many unsolved problems.

4. All values are preserved.

Science has fully demonstrated that no smallest mote of physical value is ever lost no matter how often or how completely it may be transformed. Bodily appetites are adapted to insure the preservation of the individual, secondarily of the race; similarly, the concept of immortality furnishes the means and the incentive for development of the higher mental qualities. As personal righteousness is the very highest of these and has advanced far beyond collective morality, so we may know that not a racial ideal or some abstract spiritual entity but the individual unit is the object of nature's solicitude. Paramount significance is given to character and intelligence; for the cosmic forces to destroy the individuals in which these qualities are personified would be to defeat the very ultimate of their own purpose, and is not to be imagined.

Since this is the most important point as it is the most nearly novel in the entire discussion, it is worthy of special emphasis. If, lying back of the cosmos, there is an intelligence at all its grand object must be to develop mental power and moral character. The strongest single force tending to foster them, particularly morality, has been the belief in a system of future rewards and punishments. Where do we now see these qualities most clearly displayed? In the nation? In the city? In the community? Not at all. The morals of a state always come far short of those of its best citizens. It has been abundantly demonstrated that men will do for their country base deeds to which they would scorn to stoop on their own account. Nay, executives of a business corporation will sanction in that company acts which for their individual profit they would shrink from in shame. And, like its morals, the intelligence of a community is invariably less than that of its wisest citizens who must yield some-

thing of their better judgment to the ignorance of their associates. Plainly the qualities of industry, scholarship, sympathy, justice, all those subsumed under the names of virtue and knowledge, find their highest expression in individuals, not in groups.

This is surely intentional. Otherwise nature, if intelligent, stands convicted of failure; or, if unintelligent, must be supposed to have wrought blindly the same result that intelligence would bring about designedly. Since both suppositions are absurd, it seems clear that the development of personality is nature's conscious method. Such being the case, is it thinkable that the cosmic mind would carelessly exterminate those personal units who, as such, are farthest on the road to accomplish its design and devote exclusive attention to a transitory society which lags far rearward? The annihilation of the individual would be an act of idiocy quite inconsistent with any intelligent cosmic purpose. Therefore, we must either deny that there is any rationality whatever behind the created universe, or else we have a sure basis for belief in the preservation, along with other and minor values, of our integral identities.

Ultimate Destiny.

Bearing in mind these necessary deductions from the purposive interpretation of the cosmos, let us endeavor to see what is the goal toward which humanity is impelled. Mathematicians can plot a curve from three given points. The straight lines in a picture, if projected, meet at a center. In like manner, viewing life as but a segment of reality, we should be able with some confidence to trace forward, perhaps also backward, the course of its journey.

Intelligence and morality have steadily increased. What can be the goal but perfect intelligence and perfect morality? These are unattainable in our physical existence. But we have already seen that physical existence is irrational, also that our personal identity is prolonged beyond the material condition; hence springs the valid inference that the goal lies in another sphere of being. Granted such a sphere, and without it there is no escape from the irrationality of creation, our problem at once becomes easier of solution. The danger lies in its being too easy and in the temptation to solve all difficulties by speculation and guesswork. But let us try to admit only those inferences which seem indubitable or at furthest to keep within the bounds of a reasonable probability.

That a spiritual realm is within such bounds is indicated by the work of those who have devoted their talents to psychical research, even if their ultimate conclusions cannot yet be universally accepted.

These investigators have collected a prodigious store of data which will bring to a careful reader, if not conviction, at least the opinion that a spiritual existence is no mere fantasy and that it may in time even be proven. Their methods are correct and their work deserves support and enlargement.

Unfortunately their conclusions, even if we accept them, do not wholly read our riddle. Rather do they indicate that the world immediately contiguous to our own is equally irrational. Evil men become evil spirits; ignorance and maliciousness abound; even the better of the alleged communicators seem subject to human limitations and imperfections. The spirits are apparently much like ourselves; and if we may believe their unanimous testimony, existence in their world involves difficulties, effort, achievement, and even so failure as it does in our own. Perhaps we have no right to expect otherwise, but the conclusion inevitably follows that if that life is also irrational, it, too, is not the final life. There must be other and higher realms beyond. In the same way there may be phases of existence prior to our own. The chief point is that the only way to find rationality in the cosmic order is to postulate several phases of existence of which ours is but one.

Objections of Science. Mallock's Paradox.

The scruples which science entertains in regard to such a theory are based upon unsupported negation, and it has been well said that no department of knowledge is competent to enter comprehensive denials. When the basic contradictions of purely physical science are considered, its summary rejection of the possibility of a supersensible existence need not disturb us. In fact, Mr. W. H. Mallock has founded upon these very contradictions a specious argument for our spiritual destiny. If, says he, we can and do believe in time and space, in mass, motion, energy, ether, directly in the face of the nullifying contraries which inhere in their very nature, we are warranted in believing in God, immortality, and moral responsibility in spite of the no worse contradictions which those conceptions involve. If we can accept the contradictions of physical nature in order to live at all, we can accept those of abstract philosophy in order to live well; that is, to progress in morality and spirituality. There seems no serious objection to this reasoning, yet it shows again the courage of despair, not of hope, unless we broaden his conception of spiritual nature until physical nature shrinks to a comparatively unimportant part of the whole, and expand his idea of the cosmos into a creation large enough to har-

monize all those phenomena which, seen only in part in our narrow region, we are deceived into regarding as irreconcilable.

The Question of Memory.

Again, the utter blank in memory touching experience in any existence previous to the present is urged against the possibility of such existence. Two replies are possible. If the totality of the existence of each individual be made up of a succession of lifetimes, or of distinct periods of sensibility corresponding to that now known as a lifetime, some one of these must be the first, and the series may conceivably begin with the present life. But this answer appears unconvincing. Human intelligence, it would seem, develops too rapidly, and in its best estate attains far too lofty heights for it to have been initiated with the life in which it now finds expression. A better answer is, that memory is suppressed at birth. Such an inhibition of faculty is supported by many analogies; in truth, that portion of the memory termed specifically recollection, tricky and uncertain even at normal, is exceedingly easily undone. Severe illness, physical or mental shock, violent stress of emotion, each has been known to cause interruption or complete submergence of all power of remembrance. In cases of split or multiple personality total arrest of memory between the different states of consciousness is often observed. Very evidently the crisis of birth, the necessity of beginning the human career in a body immature to the point of vacuity, the advantage of undivided attention in coping with earthly environment, perhaps, too, the will of the cosmic intelligence, very evidently these are amply sufficient to account for all amnesia. And we may legitimately presume that memory will eventually be regained in some more advanced stage of existence.

Science does not preclude the sort of organization of the cosmos which is suggested; it merely demurs that we have no valid evidence, while in general holding aloof from examination of the phenomena alleged to be evidence, largely because these phenomena do not readily lend themselves to exact experiment. But more and more the attention of competent investigators is turned toward such study, and we have reason to expect in no great while definite results from their labors.

The Cosmic Content.

The result of our inquiry may now be stated in simple terms. The cosmos is rational and purposive. But so far as our direct

examination of it can determine, it is neither rational nor purposive, as shown by the failure of philosophy, revelation, and science to offer any acceptable explanation. Hence the conclusion follows coercively that we are able to examine only a segment of the whole cosmos, and that the whole cosmos consists of a series of phases of existence leading upward through reality, of which our own phase, the material, is but one, possibly a minor one. The chief purpose of the cosmic process is the development of intelligence and character, its goal, perhaps unattainable save in infinity, being perfect knowledge and perfect morality. The intelligence behind the cosmos, proved by the presence of intelligence in material nature, is unknowable to us in this sphere of existence, and speculation on its possible personality or attributes is useless; but of its real existence we can have no doubt.

This theory seems to solve at least in a measure our most puzzling problems, such as the presence of evil and the apparent futility of effort. An enforced morality is no morality, hence is worthless. We must achieve moral character through our own exertions, and the possibility of such voluntary achievement involves the possibility of failure. Unless the cosmic intelligence keeps hands off we can win but a vicarious morality, and if it does keep hands off our failures must engender evil. It is our task to overcome this evil. As to animals, their development doubtless is left as free as our own. The horrors of nature are, therefore, a normal product and but constitute the price which all sensate creation pays for being free, not slaves of some outside power.

Our Vision Cleared.

But under this conception how greatly all these evils shrink! How trivial do our harshest troubles seem! If this life is but one of many stages on our immeasurable journey, what matter if it be cut short a few inconsequential months? Of what account our petty pains and trials? They become like the frequent stops of a train that bears us homeward, annoying perhaps but of no real moment. Life, instead of being the whole of existence, appears only as a day in our experience. It is to be improved to our very utmost, but after all it is but a day and could be omitted without appreciable loss. The worries that torment us hour by hour will be forgotten on the morrow or remembered with a smile, and ages hence in some far off higher sphere we shall look back upon this life as we do now upon the half-forgotten troubles of our childhood.

Sic transit dum crescet animula.